

### **Abstract**

A fluid dispensing apparatus is described, the operation of which involves installation therein of a single-use fluid dispenser cartridge. The cartridge itself comprises a pliable fluid reservoir and a fill tube assembly. The fill tube assembly -- the component which most immediately acquires and delivers a definable volume of fluid into a vial or other container -- is characterized by its incorporation of means for continuously measuring fluid volume therein, particularly, as a function of electrical capacitance. Accuracy, precision, and reliability are improved. The apparatus can be used to dispense a broad range of fluids, including viscous fluids. No moving mechanical parts are required in the measurement of capacitance.